

CUSTOMER NO.: 24498
Serial No. 09/936,983
Reply to Final Office Action dated: 11/15/06
Response dated: 2/13/07

PATENT
PD990019

REMARKS

In the Office Action, the Examiner stated that claims 13-28 are pending in the application and that claims 13-28 stand rejected. None of the Applicant's claims are amended by this response.

In view of the following discussion, the Applicant respectfully submits that none of these claims now pending in the application are rendered obvious under the provisions of 35 U.S.C. § 103. Thus the Applicant believes that all of these claims are now in allowable form.

Rejections

A. 35 U.S.C. § 103

The Examiner rejected the Applicant's claims 13 and 23 under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi et al. (US Patent No. 5,870,523, hereinafter "Kikuchi") in view of Willis (U.S. Patent No. 6,154,603). The rejection is respectfully traversed.

The Examiner cites Kikuchi for teaching a method for recording a bitstream on a bitstream recorder such that the recorded bitstream can be replayed in a trick play mode including all of the elements of the Applicant's invention except that Kikuchi fails to teach that the access unit information allow for the recorded bitstream to be used for trick play operations. As such, the Examiner cites Willis for teaching a system for decoding pictures for trick play operations. The Examiner alleges that in Willis, the access unit allows the recorded bitstream to be accessible for trick play and that the combination of the teachings of Kikuchi and Willis make obvious the invention of the Applicant. The Applicant respectfully disagrees.

The Applicant respectfully submits Kikuchi and Willis, alone or in any allowable combination, absolutely fail to teach, suggest or anticipate at least the Applicant's claim 13, which specifically recites:

"A method for recording a bitstream on a bitstream recorder such that the recorded bitstream can be replayed in a trick play mode, the method comprising:

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recording said bitstream in predetermined-size stream object units, said recorded bitstream having data contained in application packets that are contained in said stream object units;

defining access units as parts of said recorded bitstream that are accessible for said trick play mode, wherein access unit information is associated with said bitstream and with related navigation data to be recorded; and

recording an access unit start map for said access unit information, **wherein in said access unit start map a respective flag is assigned to each one of said stream object units**, each of said flags indicating with a first value that the start of one of said access units is contained within a range of said recorded bitstream consisting of a corresponding stream object unit and the immediately subsequent stream object unit, or indicating with a second value that no corresponding access unit exists for that flag and its related stream object unit." (emphasis added).

Support for the Applicant's new claims can be found specifically on page 1, lines 15-17, page 2, lines 10-35, page 3, lines 26-27, page 4, lines 19-20 and 26-27, page 5, lines 4-5 and 9-10 and 20-21, page 11, line 26, page 12, lines 15-18, page 14, lines 28-30, page 15, lines 3-7 and 18-27 and Figs. 3-5 and 10-11. As clearly evident from the portions of the Applicant's Specification presented above and as claimed in at least the Applicant's claim 1, in the invention of the Applicant mixing effects which have a rhythmic dynamic range are generated because a third modulation signal is derived from an audio signal.

In contrast to the invention of the Applicant, there is absolutely no teaching, suggestion or disclosure in Kikuchi and Willis, alone or in any allowable combination for a flag list or bit array assigned to the SOBUs wherein each bit serves as a flag for the corresponding SOBU, and for signaling whether it contains an access unit (i.e., an I picture in the case of video bit streams or a corresponding data section in an ISO/IEC 13181 program stream) as taught in the Applicant's Specification and claimed by at least the Applicant's new claim 13. More specifically, Kikuchi fails to teach, suggest or make obvious at least "recording an access unit start map for said access unit information, **wherein in said access unit start map a respective flag is assigned to each one of said stream object units**, each of said flags indicating with a first value that the start of one of said access units is contained within a range of said recorded bitstream consisting of a corresponding stream object unit and the immediately subsequent stream object unit, or indicating with a second value that no corresponding access unit exists for

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that flag and its related stream object unit" as taught in the Applicant's Specification and claimed by at least the Applicant's new claim 13.

More specifically, and referring to Kikuchi, Fig. 35A of Kikuchi does not show an access unit start map containing a flag for each stream object unit. Instead Fig. 35A shows start addresses, FWDAn, which necessarily consist of several bits (col.21, lines 1-4). In addition, in Kikuchi Fig. 35B teaches and illustrates that the address values, FWDAn, each start with two bits or flags. In contrast, in the invention of the Applicant, a single bit (flag) is **assigned to each one of said stream object units**, each of said flags indicating with a first value that the start of one of said access units is contained within a range of said recorded bitstream consisting of a corresponding stream object unit and the immediately subsequent stream object unit, or indicating with a second value that no corresponding access unit exists for that flag and its related stream object unit. In contrast to the invention of the Applicant, Kikuchi uses two bits and the two Kikuchi bits have a very different function (See, col.21, lines.9-19) compared to that of the single bit used in the invention of the Applicant.

The Applicant further submits that Willis absolutely fails to bridge the substantial gap between Kikuchi and the claimed invention of the Applicant. That is the Applicant submits that there is absolutely no teaching, suggestion in Willis for "recording an access unit start map for said access unit information, **wherein in said access unit start map a respective flag is assigned to each one of said stream object units**, each of said flags indicating with a first value that the start of one of said access units is contained within a range of said recorded bitstream consisting of a corresponding stream object unit and the immediately subsequent stream object unit, or indicating with a second value that no corresponding access unit exists for that flag and its related stream object unit" as taught in the Applicant's Specification and claimed by at least the Applicant's new claim 13. In contrast to the invention of the Applicant, Willis merely teaches a method for picture decoding and display in an apparatus reproducing from a digital disk. The method of Willis includes the steps of transducing a digitally encoded signal from the disk, storing the digitally encoded signal in a first memory, decoding the digitally encoded signal to produce a picture, storing the picture in a second memory, coupling the picture from the second memory for display, and controlling

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the storing in the second memory and the coupling for display to occur substantially concurrently. However, there is absolutely no teaching or suggestion in Willis for at least "recording an access unit start map for said access unit information, wherein in said access unit start map a respective flag is assigned to each one of said stream object units, each of said flags indicating with a first value that the start of one of said access units is contained within a range of said recorded bitstream consisting of a corresponding stream object unit and the immediately subsequent stream object unit, or indicating with a second value that no corresponding access unit exists for that flag and its related stream object unit" as taught in the Applicant's Specification and claimed by at least the Applicant's new claim 13.

As such and for at least the reasons recited above, the Applicant submits that Kikuchi and Willis, alone or in any allowable combination fail to teach, suggest or make obvious at least a flag list or bit array assigned to the SOBUs wherein each bit serves as a flag for the corresponding SOBU, signalling whether it contains an access unit, i.e. an I picture in case of video bit streams or a corresponding data section in an ISO/IEC 13818-1 program stream (video or audio) as taught and claimed by the Applicant.

Therefore, the Applicant submits that for at least the reasons recited above, the Applicant's claim 13 is not rendered obvious by the teachings of Kikuchi and Willis, alone or in any allowable combination, and, as such, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

Likewise, the Applicant's new independent claims 22 and 28 recite similar relevant features as recited in the Applicant's claim 13. As such and for at least the reasons recited above, the Applicant submits that independent claims 22 and 28 are also not rendered obvious by the teachings of Kikuchi and Willis, alone or in any allowable combination, and as such, fully satisfy the requirements of 35 U.S.C. § 103 and are patentable thereunder.

Furthermore, the Applicant's dependent claims 13-21 and 23-27 depend either directly or indirectly from the Applicant's independent claims 13 and 22, respectively, and recite additional features thereof. As such, the Applicant submits that at least because the Applicant's claims 13 and 22 are not rendered obvious by the teachings of Kikuchi and Willis, alone or in any allowable combination, the

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Applicant further submits that the Applicant's dependent claims 13-21 and 23-27, which depend either directly or indirectly from the Applicant's claims 13 and 22, respectively, are also not rendered obvious by the teachings of Kikuchi and Willis, alone or in any allowable combination, and, as such, fully satisfy the requirements of 35 U.S.C. § 103 and are patentable thereunder.

The Applicant reserves the right to establish the patentability of each of the claims individually in subsequent prosecution.

Conclusion

Thus the Applicant submits that none of the claims, presently in the application, are rendered obvious under the provisions of 35 U.S.C. § 103. Consequently, the Applicant believes that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

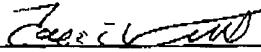
If however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion, it is respectfully requested that the Examiner telephone the undersigned.

No fee is believed due. However, if a fee is due, please charge the additional fee to Deposit Account No. 07-0832.

Respectfully submitted,

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